

Product summary

The NOMOS N-Series family is a transformer control cabinet “off-the-shelf” solution for most power transformers, autotransformers and shunt reactors. These control cabinets were engineered according to the most up-to-date IEEE standards for transformer control cabinets. Each series in the product family can be configured by choosing from a list of models in order to match particular requirements. The cabinets are already manufactured and waiting for the addition of the final options before testing and shipping, thus allowing extremely competitive lead times.

							
Legend			Light	Essential	Essential+	Limited	Premium
✓ = Standard Opt. = Optional — = Not available			○	○	○	○	○
Typical applications	ONAN/ONAF/ONAF Small power transformers		✓	—	—	—	—
	ONAN Power transformers, Shunt reactors,		—	✓	—	—	—
	ONAN/ONAF/ONAF Power transformers with optional LTC control		—	—	✓	—	—
	ONAN/ONAF/OFAF Power transformers		—	—	—	✓	—
	ONAN/ONAF/OFAF Power transformers with optional LTC control		—	—	—	—	✓
Drawings	As-manufactured drawing set	Schematic diagram					
		Physical views	✓	✓	✓	✓	✓
		Internal wiring diagram with external connection point available					
Electrical	Power input	120/240 VAC, 60 Hz, 1φ, 3 W	✓	✓	—	—	—
		240 VAC, 60 Hz, 2-3φ, 3 W	—	—	✓	—	✓
		480 VAC, 60 Hz, 3φ, 3(4) W	—	—	—	✓	—
	CT blocks	Molded shorting type	✓	✓	✓	✓	✓
		Maximum quantity of current test switches for hot-spot CTs	1	6	8	8	8
		Maximum quantity of bushing CTs	1	16	20	24	32
	Temperature controller	49W (winding temperature gauge)	✓	Opt.	Opt.	Opt.	Opt.
		Electronic temperature monitor and controller (top oil + up to 3 windings + OLTC + ambient or bottom oil temperature)	—	✓	✓	✓	✓
	Cooling control capability	Max. 2 stages of cooling (15 A max. of controlled equipment per stage)	✓	—	✓	✓	✓
		Max. 2 stages of cooling (2x 15 A max. of controlled equipment per stage)	—	—	—	Opt.	Opt.
	Annunciator	Seekirk B1000 series	—	1	1	2	2
	Pump	Pump package with oil flow and control/overload	—	—	—	Opt.	Opt.
	Internal cabinet lighting	LED bulb, 60 W equivalent					
	Terminal blocks	Screw type blocks for ring tongue wire terminals					
	Wire	SIS 90C 600 VAC VW-1 grey cable					
	Equipment identification	Lamicoid tag/nameplate on every device					
	Mode selector for cooling group	Man/Off/Auto selector for each cooling stage to facilitate maintenance and operation	✓	✓	✓	✓	✓
	Cooling breaker(s)	Thermal magnetic type, rated 600 V					
	Lead group selector	Used to choose which cooling group works first to spread usage evenly on fans/pumps					
	Heaters	Anti-condensation PTC heaters					

			Light	Essential	Essential+	Limited	Premium				
Comms	Serial communication	DNP / Modbus over RS-485	—	✓	✓	✓	✓				
		DNP / Modbus over ST multimode fiber									
	Ethernet communication	DNP / Modbus / IEC 61850 over RJ45 copper									
On-load tap changer monitoring and control	LTC controller	Beckwith M-2001D	—	—	✓	—	✓				
	LTC position indicator	Incon 1250B									
	OLTC equipment (oil level, temp. sensor, etc.)	Terminal strip / 12 points available to bring the desired signals									
	Complete remote control capabilities	Yes									
	OLTC monitor and tap position	Optional sensorless tap position, protection against contacts coking and rapid OLTC heating events									
Transformer device interaction capability/ alarm	Oil level gauge (71Q)	High oil level (main tank)	—	✓	✓	✓	✓				
		Low oil level (main tank)	✓								
	Pressure relief device (63-PRD)	High oil pressure	✓								
	Sudden pressure relay (63-SP)	Rapid pressure rise	✓								
	Gas accumulation relay (63GD)	Gas detection	—								
	Buchholz relay (63B)	Oil flow trip and/or gas accumulation alarm	—								
	Winding temp. (49W)	Terminal strips for oil temperature sensors	✓					Opt.	Opt.	Opt.	Opt.
	Oil temp. (26Q)	Terminal strips for oil temperature sensors	✓					✓	✓	✓	✓
	Maintenance-free dehydrating breather or Inertiaire (main tank)	Terminal strip for alarms with a provisional breaker for power	—								
	Loss of voltage relay	Alarm on terminal for loss of voltage in main supply	—								
	On-line gas and moisture monitor	120 V, 15 A breaker	—								
		1 x 6-point terminal block for alarms	—								
Materials	Enclosure size	Approximate enclosure dimensions (inches) *subject to change* H x W x D	30 x 24 x 12	56 x 54 x 20	66 x 65 x 20	69 x 81 x 20	76 x 85 x 20				
	Casing	11-gauge stainless steel (painted ANSI 70 grey)	—	✓	✓	✓	✓				
		14-gauge stainless steel (polished)	✓	—	—	—	—				
	Backplate	Cold rolled steel (painted white)	16 Ga	12 Ga	12 Ga	12 Ga	12 Ga				
	Swing panel(s)	Cold rolled steel (painted white)	16 Ga	12 Ga	12 Ga	12 Ga	12 Ga				
	Lifting eyes	Stainless steel	✓	✓	✓	✓	✓				
	Hardware/hinges	Stainless steel									
Mechanical	NEMA type	3R	✓	✓	✓	✓	✓				
	Mounting bracket	Double L-shaped steel beam, universal bracket	—	✓	✓	✓	✓				
		4x brackets for ½" fasteners	✓	—	—	—	—				
	Exterior doors	3-point latch mechanism, pad lockable, single handle	—	✓	✓	✓	✓				
		¼ turn latches, pad lock provision	✓	—	—	—	—				
	Interior doors	Equipped with support wheels to reduce stress on hinges when in closed position	—	✓	✓	✓	✓				
		Unique locking mechanism for secured transport	—								
	Gland plate	Bolted at the bottom, installed prior to shipping	✓								
	Breather and drain	NEMA 3R to protect against insect ingress									